

## FLUOROCOAT Surface Modifier

Product Code: TFCF

### PRODUCT DESCRIPTION

**FLUOROCOAT** is designed to give high levels of liquid repellency to printed circuit boards and other electronic devices. The low film strength allows assemblies to be coated without masking. Any metal contacts, switches or other moving parts may be safely coated, as the coating is removed by very low friction forces. This eliminates the requirement for masking.

**FLUOROCOAT** is a clear, mobile solution of an oleophobic-hydrophobic fluorochemical polymer in a hydrocarbon solvent. When applied to clean surfaces such as copper, glass, steel, aluminium or tin, the **FLUOROCOAT** solution dries to a thin transparent film of very low surface energy. The low energy film repels liquids such as lubricating oils, silicone fluids and water. **FLUOROCOAT** will form a clear, uniform film on a wide variety of substrates.

**TFCF** contains a UV trace to allow easy inspection.

### BENEFITS

Films cast from **FLUOROCOAT** solutions have excellent repellency to hydrocarbon oils, silicone oils, synthetic fluids and aqueous solutions. The dried film has a free surface energy which is lower than PTFE or polyethylene. This property enables non-solubilising solvents such as heptane, toluene and water to bead and drain freely from surfaces coated with **FLUOROCOAT** leaving the film intact. The dried film can withstand temperatures above 100°C for long periods without losing the repellent properly.

### USES

The low surface energy, insolubility and film-forming properties of **FLUOROCOAT** make it an ideal coating for printed circuit boards to give very high levels of moisture repellency. The thin film cast allows coating under devices used in SMT. Complete finished boards can be quickly and easily coated without having to mask edge connectors or piezo speaker devices etc. **FLUOROCOAT** can be used on almost

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every electronic device that requires high levels of repellency to moisture.

### METHODS OF APPLICATION

The **FLUOROCOAT** solution can easily be applied to clean, dry surfaces by brush, spray or dipping. Dip coating is usually convenient and produces a more uniform film. Applying the coating by brush or spray may lead to incomplete and/or uneven films.

**FLUOROCOAT** can be diluted with the hydrocarbon solvent to give an increase or decrease in the drying times. Normally the solution will air dry in one to two minutes. A slight increase in repellency and insolubility occurs if the film is baked at 100°C for 15 minutes after drying.

### TYPICAL PROPERTIES (not for specification purposes)

Form	Thin liquid
Solids	< 2%
Appearance	Colourless to light coloured liquid
Specific Gravity @ 25°C	0.8 g/ml
Flash point	7°C
Surface Energy of dried film	less than 18 dynes/cm

### STORAGE AND HANDLING

Storage: **FLUOROCOAT** should be stored at or below room temperature. Containers should be tightly closed and well away from sources of ignition. When not in use **FLUOROCOAT** solutions should be returned to their container and the lid tightly closed.

Handling: Please refer to the current Material Safety Data Sheet and precautionary label.

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### PACKAGING

250ml pump spray  
5L bulk

### ORDER CODE

TFCF250ML  
TFCF05L

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